

**AMENDMENTS TO THE CLAIMS**

The following listing of claims replaces all prior versions and listings of claims in the above-referenced application:

- 1           1.       (Currently amended)     An apparatus comprising:  
2           a substrate, an optoelectronic device and a matching circuit formed on the  
3           substrate, the optoelectronic device having a frequency response and the matching  
4           circuit configured to change the frequency response; and  
5           a driver formed separate from the substrate, the driver configured to control  
6           the optoelectronic device within a desired frequency range, wherein the substrate is  
7           selectively flip-chip coupled to the driver via bond pads on the substrate such that the  
8           matching circuit is interposed between the optoelectronic device and the driver.
- 1           2.-3.   (Canceled)
- 1           4.       (Previously presented)   An apparatus as in claim 1, wherein the  
2           matching circuit is selected to match the frequency response of the optoelectronic  
3           device to the driver for optimal performance.
- 1           5.       (Original)     An apparatus as in claim 4, wherein the optoelectronic  
2           device is a Vertical Cavity Surface Emitting Laser (VCSEL).
- 1           6.       (Original)     An apparatus as in claim 4, wherein the optoelectronic  
2           device is an edge-emitting diode.
- 1           7.       (Original)     An apparatus as in claim 4, wherein the matching circuit  
2           includes a passive device from the group consisting of inductors, capacitors, resistors,  
3           stubs, and diodes.
- 1           8.-14.   (Canceled)

1           15.     (Previously presented)     An apparatus as in claim 1, wherein the  
2     driver comprises an amplifier that communicates with and amplifies a signal from the  
3     optoelectronic device.

1           16.     (Previously presented)     An apparatus as in claim 15, wherein the  
2     matching circuit comprises multiple stages.

1           17.     (Previously presented)     An apparatus as in claim 16, wherein a select  
2     number of stages are coupled between the optoelectronic device and the amplifier.

1           18.     (Previously presented)     An apparatus as in claim 17, wherein the  
2     matching circuit includes a passive device from the group consisting of inductors,  
3     capacitors, resistors, stubs, and diodes.

1           19.     (Previously presented)     An apparatus as in claim 4, wherein the  
2     optoelectronic device is a photosensor.

1           20.     (Previously presented)     An apparatus as in claim 19, wherein the  
2     photosensor is flip-chip mounted to the amplifier.